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ABSTRACT

Alternative education has been advocated as a means for preventing juvenile delinquency. The argument has been that nontraditional educational programs tailored to the needs of students whose educational careers have been marked by academic failure and/or conflict can increase educational success and thereby forestall delinquent behavior. This paper examines aspects of alternative programs that appear most promising for preventing delinquency and discusses a number of issues in alternative education that merit further research. References append the paper. (Author/BK)

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DELINQUENCY PREVENTION THROUGH ALTERNATIVE EDUCATION

I. INTRODUCTION

Alternative education has been advocated as a means for preventing juvenile delinquency (Gold, 1978). The argument has been that nontraditional educational programs tailored to the needs of students whose educational careers have been marked by academic failure and/or conflict ("disruptive behavior") can increase educational success and thereby forestall delinquent behavior.

This paper examines aspects of alternative programs which appear most promising for preventing delinquency and discusses a number of issues in alternative education that merit further research.

II. ALTERNATIVE EDUCATION: A RESPONSE TO INTERRELATED PROBLEMS

Consonant with the rapid technological advances since the 1940's, secondary education has become a reality for most 14 to 17 year olds. However, concurrent with these developments has been an increase in a number of problems which have led to the advocacy of alternative educational approaches for certain students.[1] Many students have not succeeded in conventional educational settings. Recent statistics reveal that 26 percent of the nation's 14 year old male students and 18 percent of the 14 year old female students are in grades lower than the national mode of ninth grade (U.S. Department of Commerce, 1977:296). According to Ernest Boyer, U.S. Commissioner of Education, 25 percent of the high school students in the

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United States leave school before they graduate (Washington Crime News Service, June 1, 1979:2).

A second concern is the problem of school violence and vandalism accompanied by the recognition that most school crimes are committed by current students. Estimates of the annual cost of school vandalism range from $200 million (U.S. Department of Health, Education, and Welfare, 1978) to $600 million (Washington Crime News Service, June 1, 1979). Vandalism, burglary, larceny, and arson rates have increased in schools as has the fear of crime (Rubel, 1977: 540). Finally, absenteeism is a major problem. Dr. Owen Kiernan reports that the national absentee rate is about 15 percent and in major cities may range from 30 percent to 50 percent (Kiernan, quoted in Bayh, 1977:23).

There is evidence that academic failure, truancy, vandalism, violence, delinquency, and dropping out are interrelated. Polk and Schafer (1972:78) have noted:

> Students who violate school standards pertaining to such things as smoking, truancy, tardiness, dress, classroom demeanor, relations with peers and respect for authority are more likely to become delinquent than those who conform to such standards.

Feldhusen et al. (1973) found that children identified by teachers as aggressive and disruptive in the classroom achieved at significantly lower levels than their peers. Similarly, Swift and Spivack (1973:392) found that students who achieved poorly academically, whether in suburban middle class or urban "ghetto" schools, were those engaged in disruptive or problem behaviors in the classroom.

A substantial body of literature has also shown relationships between poor academic achievement in school and delinquent behavior outside the school. (See Silberberg and Silberberg, 1971, for a review of the literature on school achievement and delinquency; Wolfgang et al., 1972:63; Elliott and Voss, 1974:135-137; Jensen, 1976:384-386.)

Finally, truancy has been identified as an early predictor of school attacks and thefts (McPartland and McDill, 1977:6) and of delinquency and school failure (Silberberg and Silberberg, 1971:27).

III. SCHOOL AS A SOURCE OF ACADEMIC FAILURE, DISRUPTIVE BEHAVIOR AND DELINQUENCY

A number of variables play a role in the problems discussed (see Elliott and Voss, 1974; Feldhusen, 1978; Hirschi, 1969; Klaus and Gunn, 1977). However, studies seeking to identify the relative importance of different factors in delinquency have consistently emphasized the role of immediate experiences. McPartland and McDill's (1977:22) analysis of data from three large surveys of urban and suburban high schools indicates school factors play a direct role in school violence, independent of conditions of employment; family wealth, structure, and size; juvenile law enforcement practices; or other conditions in the larger society.

> ...lack of success in school as measured by report card grades is correlated with the probability of school disciplinary problems holding constant the conventional measures of student background such as ability level, race, sex, parents' education, family wealth, and family size (McPartland and McDill, 1977:14).

Separate studies by Hirschi (1969), Linden (1974), Polk and Schafer (1972), and Elliott and Voss (1974), as well as Jensen's (1976) reanalysis of data collected by Wolfgang et al. (1972), have also suggested that immediate school experiences are closely related to delinquent behavior.

The link between immediate school experiences and delinquency is given further support by Elliott and Voss's (1974: 119) finding that delinquent youths who dropped out of school were more delinquent *before* they left school than after dropping out, suggesting the possibility that school experiences themselves contribute to delinquent behavior.

IV. SCHOOL EXPERIENCES AND DELINQUENCY PREVENTION

The experience of academic failure or success in school is an independent predictor of delinquency that transcends social class or ethnicity. Regardless of their socioeconomic background, youths who experience academic success are less likely to be delinquent than those who do not (Call, 1965; Jensen, 1976; Polk and Halferty, 1966:95; Stinchcombe, 1964). Students tracked into lower tracks in schools because of low perceived ability or even for nonacademic reasons (Kelly, 1977:205) become increasingly dissatisfied with school, increasingly absent and truant and less committed to school. Providing opportunities for a greater proportion of students to experience success in school appears an important goal for educational programs seeking to prevent delinquency.

Commitment to educational pursuits is a second important factor. Elliott and Voss (1974:151) found where commitment was low, delinquency, school crime, vandalism, and dropout are likely. Hirschi's data (1969:121) suggest the importance of attachment to school. Sakumoto (1978:26) has found this variable independently related to delinquency. When students do not like school, behavior problems and delinquency are more likely. Thus, both Elliott and Voss's and Hirschi's research suggest that educational innovations which encourage students to feel part of the school community and committed to educational goals should hold promise for preventing delinquency.

A third factor of importance in association with delinquent or deviant peers in the context of school. Analysis of data from three separate self-reported delinquency studies[2] has shown a strong relationship between having delinquent friends and delinquent behavior (Weis et al., 1979 forthcoming). This relationship holds even when other variables are controlled. It is important for both sexes, though the strength of the relationship varies with sex, age, and seriousness and nature of offenses.

Importantly, association with delinquent peers appears to be a school-related variable. Students who like school and have higher grades are less likely to have delinquent friends than students with lower grades and those with less favorable attitudes toward school (Sakumoto, 1978). Moreover, delinquent associations at school are more closely related to delinquency than perceptions of the amount of delinquency in the community or exposure to delinquents or criminals in the family (Elliott and Voss, 1974:163). Young people establish peer attachments at school. If they develop attachments to delinquents or others engaged in problem behavior at school, they are more likely to engage in these behaviors themselves.[3] Educational innovations which encourage students to develop attachments with more conventional peers and with teachers or other conforming adults should hold promise for preventing delinquency.

V. ALTERNATIVE EDUCATION ELEMENTS FOR PREVENTING DELINQUENCY AND RELATED PROBLEM BEHAVIORS

Several elements of alternative education approaches appear promising for preventing problem behaviors. However, few programs which combine these elements have been evaluated using research designs and outcome measures adequate for determining program effects in preventing delinquency. This problem and its implications for policy and research will be discussed later. The elements that appear most promising for delinquency prevention are listed below:

A. Individualized Instruction

Disaffected students are usually behind their age peers in development of cognitive skills. To present students with challenging and realistic educational tasks, alternative schools should assess student achievement levels to determine appropriate course work and to obtain a baseline for measuring progress. Since it is likely that student achievement levels

will vary, individualized learning approaches are important. Without an individualized curriculum, the alternative may simply become another environment in which some students will experience failure due to an inability to keep pace with their classmates and other students will be bored and disruptive because they are held to an unchallenging learning schedule.

To the extent that individualized learning programs can be tailored to the interests of students, motivation and commitment to the educational endeavor should increase. Thus, programs such as City High School in Grand Rapids, Michigan, in which students design their own course curricula in accordance with their individual interests and the requirements of the Board of Education, are desirable. Odell (1974) found better student participation in school work and lower delinquency rates in an alternative education program for delinquent youths which integrated high interest materials into a self-paced and individualized programmed learning format. Vocational and academic subjects have also been integrated to teach students basic skills and to maintain their interest in a number of alternative programs.

B. Reward Systems

The rewards offered to students by the school are external indicators of success. To generate commitment and to motivate students effectively, these rewards must be attainable and clearly contingent on their effort and proficiency.

To ensure these conditions are met, realistic, attainable goals must be established for each student (Romig, 1978: 35-36) with clear rewards outlined for different levels of demonstrated effort and proficiency (Bednar et al., 1970; Tyler and Brown, 1968). Contracts without differential rewards attached do not appear to result in improved academic performance (Raffaele, 1972; Romig, 1978:31).

For the most disaffected students, initial contracts may need to reward effort and persistence such as regular attendance, coming to class "straight," or workin on a lesson for

a certain period of time (Fo and O'Donnell, 1974). This approach may be necessary to provide basic success experiences which motivate increasing levels of effort (Romig, 1978). However, over time, learning contracts should place increasing emphasis on demonstrated proficiency rather than effort alone. This shift in emphasis over time should be explicitly clarified with students and clear proficiency goals should be established (Webb and Cormier, 1972). Failure to link rewards to achievement (as opposed to effort) can, over time, diminish the value of the rewards as indicators of academic success.

Rewards do not have to be limited to traditional grades. They can be keyed to specific interests and goals of each student. Students who have not obtained good grades in traditional classrooms may have discounted the importance and validity of grades. Varied reward systems, such as token economies or systems in which credits toward desired goals are offered for academic progress, should be instituted.

Long-term educational goals should also be clearly established with each student. These may include admission to GED testing, admission into a trade apprenticeship program, or placement on the job in lieu of or in addition to attainment of a traditional high school diploma. Again, it is important that academic standards not be compromised, but rather that alternative routes to success experiences be developed for all students (Cohen and Filipczak, 1971).

To this point, the discussion of rewards has focused on rewarding academic progress. Rewards for positive classroom behaviors have also been used for classroom management. (See Davidson and Seidman, 1974 and Feldhusen, 1978 for reviews.) Aggressive and disruptive behaviors in classrooms have been decreased by various reinforcement approaches including verbal reinforcers (Jensen, 1975), use of free time, and token economies (McLaughlin, 1976). Teachers (Silverman and Silverman, 1975), parents (Stuart, Jayaratne, and Tripodi, 1976), and peers (Strain, Cooke, and Apolloni, 1976) have

been taught contingency contracting to control classroom behavior problems. However, the ultimate goal of classroom reward systems should be to enhance academic success, not simply to create a classroom of controlled, docile students (Winett and Winkler, 1972). The risk in the use of behavioral reinforcements for classroom management is that alternative classrooms will become "like the controlled, directive classrooms from which the students have been referred" (Arnove and Strout, 1978:22). Careful attention should be given to integrating rewards for academic progress with rewards which maintain the classroom as an orderly environment for learning. Where this occurs, disruptive behaviors should be minimized and academic success enhanced.

Research by Rollins et al. (1974) suggests the promise of contingent reward systems in broad school applications. In "Project Success Environment" sixteen inner city public school teachers were trained to reinforce positive classroom behaviors oriented toward academic success, to ignore inappropriate behaviors, and to avoid aversive responses. These techniques were used over the course of the school year with 730 black students from disadvantaged backgrounds in Grades 1-8 in the Atlanta public schools. These students were compared with students in classes of matched control teachers. The experimental classes were less disruptive and more involved with their task assignments. Additionally, their academic achievement was superior. In reading aptitude, experimental students gained .69 years in comparison to the controls' gain of .34 over an eight-month period. In arithmetic achievement, the experimental students gained .65 in comparison to a .39 control gain. While the design of the study (i.e., use of matched control groups) does not control for all possible variables which could have caused these differences (such as selection factors), it does suggest that contingent reward systems hold promise for increasing students' academic success.[4]

C. Goal-Oriented Work and Learning Emphasis in the Classroom

Individualized instruction with contingent reward systems should not be confused with the concept of "open classrooms" or "open education," which has been described as

> ...an informal approach to education...involving high degrees of curricular, instructional, and organizational flexibility and premised on the notion that children learn what they want to learn, when they want to learn it, and at their own pace (Duke, 1972:36).

While earlier studies of open classrooms in England reported positive results (Silberman, 1970: 260; Haddon and Lytton, 1971), recent research by Bennett (1976) has shown that students in "open classrooms" performed more poorly on reading and mathematics tests than did students in more formal and mixed classrooms.[5] Critics have charged that open classrooms fail to provide clear standards of achievement for students and may fail to generate classroom-wide norms favoring educational attainment and, thus, lead to anomie and a loss of community of shared purpose in the classroom (Hurn, 1978). Thus, some authors have suggested that a "work and learning" atmosphere, in which development of cognitive skills is clearly a central task, is an important element in generating academic success (Hurn, 1978; Romig, 1978).

Bennett (1976) provides data to support such a hypothesis within the context of an open classroom. He found that students in one of the open classrooms he studied performed consistently better than would have been predicted from past test scores. This classroom differed from the other open classrooms in that it was "characterized by a high degree of work orientation, a clearly organized and well-structured curriculum, and an orientation towards the cognitive rather than the affective and emotional growth of the students" (Hurn, 1978:244).

A "work and learning" orientation in the classroom can provide a context in which efforts to attain educational goals make sense to students. Individualized learning approaches and rewards contingent on proficiency are likely to require a context in which academic achievement remains valued, if genuine academic success is to be experienced (Odell, 1974; Romig, 1978). Without a clear orientation to work and learning in the classroom, even competent and caring teachers are unlikely to succeed in increasing academic achievement, reducing official delinquency, or affecting school dropout rates of their students (Reckless and Dinitz, 1972). Teachers should structure their classes so that students' attention and effort are clearly focused on working to develop cognitive skills and to attain educational goals.

D. Conducive Physical and Human Factors

1) Small Student Population in the Program

Research has consistently shown correlations between school size and rates of school crime. McPartland and McDill found that smaller schools were characterized by lower levels of student offenses when ability level, racial composition, and economic status of students were controlled (1977: 20-21). The National Institute of Education Violent Schools-Safe Schools Report (U.S. Department of Health, Education, and Welfare, 1978) also found school size to be correlated with the incidence of school crime. Large schools had greater property loss through burglary, theft, and vandalism than schools with smaller student populations.

Alternative schools generally have a small number of students in comparison to the conventional schools from which their students are drawn. Despite the disruptive histories of many of their students, they are usually characterized by "almost a total lack of violence" (Berger, 1974) and discipline problems (Duke and Perry, 1978). Their small size may be a contributing factor (Arnove and Strout, 1978:5).

In attempting to explain this relationship, McPartland and McDill and the authors of the Violent Schools-Safe Schools Report argue that school size is probably important more for its contribution to interactive characteristics in the school than for its direct effect on crime. They suggest that the correlation between school size and school crime reflects the fact that students are less likely to be anonymous in small schools and more likely to establish informal personal relationships with teachers. In turn, personal attachments between students and teachers in the school setting may inhibit school normlessness, increase student attachment and commitment to school, and inhibit school crime. Gold (1978) suggests that warm, accepting relationships between students and teachers can enhance student self-esteem and constrain delinquent behavior. Furthermore, the lack of anonymity in small schools may inhibit school crime by making it more difficult for students to avoid recognition for misdeeds.[6]

These arguments are consistent with evidence on correlates of delinquency reviewed earlier. Alternative schools should seek to facilitate warm personal relationships between students and teachers and seek to minimize student anonymity in the school setting. Limiting the size of the school or number of students served is one mechanism for accomplishing these goals. Although specifying an "optimal" size for alternative programs is a speculative venture, Duke notes that the English "consider schools with more than 320 students too large" (1972:46).

2) Low Student-Adult Ratio in the Classroom

The NIE Violent Schools-Safe Schools Report (U.S. Department of Health, Education, and Welfare, 1978) found that in schools with fewer students in each class where teachers taught fewer different students each week, there were lower rates of student violence. Again, the physical factor of

student-adult ratio is likely to be important for its influence on interactive variables. When teachers work with a small number of students, they have more opportunity to relate to students as individuals, to provide individual attention, and to establish personal relationships.

An optimal "student-teacher" ratio has not been empirically established though a range of from 10 to 1 to 15 to 1 appears desirable. A student-adult ratio of this size does not necessarily demand an exorbitant budget. Alternatives such as Philadelphia's Parkway Program have utilized community business and university resources, parents, and volunteers to supplement the teaching staff. The Learning Alternative Project in Tampa, Florida, has combined the resources of the state Department of Health and Rehabilitation Services (DHRS) and the county school district in an alternative junior high program to achieve a student-adult classroom ratio of 5 to 1. CETA funds have also been used to provide additional staffing in alternative programs.

3) Caring, Competent Teachers

The importance of attachments to conventional others in preventing delinquency suggests the value of promoting caring relationships between teachers and students (Gold, 1978). The NIE Violent Schools-Safe Schools Report (U.S. Department of Health, Education, and Welfare, 1978) indicates that the less students value their teachers' opinions, the greater the property loss due to vandalism and burglary in the school. Process evaluations of alternative schools in Chicago, Dade County, and Grand Rapids (Arnove and Strout, 1978:5), have identified teachers as important elements in students' academic success in alternative schools.

Teachers' personal characteristics and teaching styles are important for establishing warm relationships of mutual respect with students who have become alienated from traditional schools (Gold, 1978:303-304). The most important

characteristic is not special training, but rather a combination of genuine interest in working with troubled students (Arnove and Strout, 1978:6), patience and determination, flexibility, and adaptability to different students (Ahlstrom and Havighurst, 1971). Alternative programs should look for these characteristics in recruiting teachers.

A teacher interviewed at the Opportunity II High School in San Francisco identified one of the most important aspects of the school as the bond of friendship and trust that grows between students and teachers there:

> Many of the kids don't have homes to return to, many come from broken families, many of the women have been sexually abused and raped by their fathers...the teachers are very important people in the students' lives (Site Visit Notes, 1979).

At Providence's Alternative Learning Project, individual evaluations of student work often take place at teachers' homes rather than at the school. At the Prologue School in Chicago, teachers are required to live within the catchment area of the school to encourage informal interactions between teachers, students, and their families as members of the same community. These examples illustrate the closeness that can develop between teachers and students and some methods alternatives have used to strengthen bonds between them.

Finally, affective education approaches can enhance positive relationships among students as well as between students and teachers. Numerous affective education curricula, emphasizing decision-making skills, communication skills, conflict resolution skills and, in some cases, clarification of individual values, have been developed.[7] According to Barr (1976), these approaches have shown promise for improving students' attitudes toward school, increasing attendance rates, decreasing disruption and suspension rates, and decreasing school violence and vandalism. Without a structured learning environment focused on incremental development

of cognitive skills, however, affective approaches and warm student/teacher relations have not been effective in promoting academic success or preventing delinquency (Reckless and Dinitz, 1972; Scheaf, 1972). Warm relationships between students and teachers must be combined with a classroom orientation toward cognitive skill development and academic achievement if the goals of academic success and delinquency prevention are to be achieved.

4) Strong, Supportive Administrator

Finally, strong leadership from the school administrator is essential. The principal, as the director of school activities, sets the "climate" for implementation of the above-listed "success" elements. Moreover, it appears that the principal directly affects rates of vandalism and violence in schools (U.S. Department of Health, Education, and Welfare, 1978:9).

Strong leadership, consistency, and fairness (Arnove and Strout, 1978:33) appear to be more important than a particular administrative or management style. Both cooperative school governance (Van Avery, 1975) and centralized authority (Wint, 1975) have been associated with positive results. The school administrator must encourage implementation of educational approaches which lead to academic success for students, establish a climate of respect for students, and establish fair and consistent discipline procedures.[8]

E. Summary

In this section a number of elements which appear to enhance the delinquency prevention potential of alternative schools have been described. These include:

1. Individualized instruction with curricula tailored to students' learning needs and interests, clear learning goals, and an individually-paced learning program.

2. Clear rewards for individual improvement in academic competency.

3. A goal-oriented work and learning emphasis in the classroom.

4. Small student population in the program.

5. Low student-adult ratio in the classroom.

6. Caring, competent teachers.

7. Strong, supportive administrator.

It is important to emphasize that none of these elements alone is likely to prevent delinquency. It is the combination which holds promise.

VI. ISSUES IN ALTERNATIVE EDUCATION

In the previous section, elements of alternative education programs which appear promising for delinquency prevention were reviewed. In this section, issues which require further investigation are discussed.

A. Student and Parent Involvement in School Decision-Making

Many of the elements already discussed can facilitate commitment to school by enhancing academic success. Another possible vehicle for enhancing student commitment to school is by involving students and their parents directly in school decision-making.

A number of schools have made efforts to increase student participation in school decision-making. After several years of increasing violence, vandalism, absenteeism, and dropout rates, the principal of Cleveland High School in Seattle enlisted the participation of students and teachers to solve school problems. Students recognized as leaders, whether "positive" or "negative," were recruited to form school problem-solving teams. An "I've Got Pride" campaign was initiated

and students designed and painted murals on hallway, classroom, and cafeteria walls. School rules were reduced to six basics: attend class; no alcohol or drugs; no weapons; no gambling; no smoking in the building; treat all with respect for their dignity, welfare, and material goods. Students and teachers participate in interviewing staff applicants and in developing school budgets. Other school policy changes included the elimination of failing grades and the awarding of credit for work completed. According to Howard (1978) the average percentage of pupils absent each period decreased from 35 percent to 5.6 percent, in-school fighting decreased, referrals to the office dropped by 50 percent, student freedom during nonclass time increased without disruptive incidents, and graduating class enrollment in college increased from 35 percent to 60 percent.

Parental involvement in school decision-making may also be a means to increase student commitment to school. In 1973, the Salt Lake City School District initiated a non-hierarchical participatory management system for all the district's schools. In each school a council composed of parents, teachers, and the principal make fundamental decicions concerning the school's curriculum, budget, and staffing. According to Dr. Donald Thomas, the District's Superintendent, vandalism costs in the district have decreased from $6 per pupil to $3 per pupil since initiation of the school site management system (Personal Communication, 1979).

Student and parent involvement in school decision-making can potentially increase student attachment and commitment to school and should, therefore, be expected to decrease the likelihood of school-related behavior problems. Unfortunately, the favorable changes at Cleveland High and in Salt Lake City Schools cannot, with confidence, be attributed to participatory school governance. Other factors may have caused the reported improvements in students' behavior. In fact, to date, analyses of school surveys which have controlled for other variables have, at best, documented only

small correlations between student involvement in decision-making and the incidence of student behavior problems (Epstein and McPartland, 1975; McPartland and McDill, 1977).

The NIE Violent Schools-Safe Schools study reported "no evidence that a more democratic form of government helps to reduce school crime" although "schools in which students feel they have no control over their circumstances are schools which tend to have more violence" (U.S. Department of Health, Education, and Welfare, 1978:134).

This lack of empirical support may result from implementation problems. *Active* student and parent participation is not always easily secured, even when supported by the school administration. An evaluation of the Parkway Program documented the failure of many students to participate actively in "town meetings," and the need to explore "methods...for encouraging broader attendance, inviting participation in forming agenda, designing methods of implementing decisions and rotating responsibility for moderating Town Meetings" (Organization for Social and Technical Innovation, 1972:54).

Duke and Perry have suggested that the key to student participation is to treat students as adults and offer them adult responsibilities. The alternative programs they studied had few rules governing behavior and gave students maximum responsibility for school governance. The authors found that although not all students participated in "town meetings, those who chose not to participate...rarely were found to be behavior problems" (Duke and Perry, 1978:396). This finding complements McKinney's suggestion that a successful participatory government should be judged by "its responsiveness to high interest community concerns, not in its ability to involve all students" (1974:18). In summary, both mechanisms and criteria for successful participatory governance appear to require further development.

Another possible problem in shared school governance is the diffusion of responsibility for decisions. Clear lines of decision-making authority and accountability must be designated if participatory approaches are to be viable.

Student and parent involvement approaches should be considered in alternative programs. Currently, the techniques for maintaining truly representative involvement are rudimentary. Assessments of efforts in this area can add to knowledge about how active involvement can be secured and problems overcome. Evaluations should seek to isolate the effects of student and parent involvement in school governance on behavior problems and delinquency.

B. Supplemental Social Services

Numerous alternative programs include specialized services such as casework and counseling. Students in the Option School in Newark, Delaware, for example, spend 20 percent of their school time in some form of counseling. Although not required, family counseling and Parent Effectiveness Training (PET) are also available. The parents of each student are either seen or spoken to every week to impress the student with the importance of his or her school work.

Other programs offer non-traditional social servies for their students. New Directions for Young Women (NDYW) in Tucson, Arizona, an organization established to promote alternatives to the detention of female status offenders, offers an alternative education program for women who have dropped out and who are between the ages of 16 and 18. Free day care is provided, allowing the young women to bring their children to school. In addition to basic education courses directed toward high school graduation or GED attainment, school activities are designed to help young women deal more effectively with the stresses of raising children. Training in

practical life skills such as balancing a checkbook and looking for a job are also provided. Students in the school can participate in NDYW's support groups, which include sessions on assertiveness training, rape prevention, birth control, childbirth, and sexuality.

While such supplementary services as counseling and support groups may be beneficial to participants (Cavan and Ferdinand, 1975; Romig, 1978:26) extensive research has failed to show counseling and casework services to be directly effective in curtailing delinquency (Berleman, 1979; Odell, 1974; Romig, 1978). If counseling and other support services are offered in alternative programs, care should be taken to document the rationale for the model of supplemental services provided, to document and describe the actual supplemental services delivered, and to evaluate the effects of the supplemental services. Without such research, it is not clear that supplemental services justify their costs from a delinquency prevention perspective.

C. Vocationally-Oriented Components

A number of schools have emphasized programs which provide orientation to and preparation for the world of work to enhance both practical skill development and commitment to school experiences. Experience Based Career Education (EBCE), for example, has been integrated into regular high school curricula in forty-five school districts across the country. Students complete some of their academic requirements through exposure to a wide variety of career opportunities. School days are divided between classroom and job sites. Students develop academic as well as job-seeking and job-holding skills and learn, first-hand, about a range of vocational options.

EBCE results are encouraging. EBCE students have lower dropout rates than matched controls, better oral communication and career planning skills than nonparticipants, and

indicate strong positive attitudes toward their schools and the EBCE (Buckman, 1976). EBCE students and comparison students achieved similar scores on the California Test of Basic Skills, suggesting that the approach does not impede cognitive skill development (Bernhardt and Owens, 1978:36). However, student selection factors not controlled in the EBCE evaluations may have contributed to the positive results.

Independence High School in Newark, New Jersey attempts to place students in job situations for a month at a time where they experience general work discipline and job expectations, as well as learn about the nature of the specific job they may be contemplating after graduation (Natriello et al., 1976) An evaluation report claims the program has created an awareness in students of the need to acquire additional skills beyond high school to get a job: "Each year, the proportion of graduates choosing college or technical schools has risen" (Natriello et al., 1976).

The Alternative Learning Center in Morgantown, West Virginia serves a population of "severely school-alienated" youth. The school offers an individualized, self-paced curriculum that emphasizes student strengths, a counseling component, and a career education program. Students receive employment orientation through guest speakers as well as pamphlets and audio-visual materials covering job preparation and occupational opportunities. A seven-session job preparation course of self-paced activities and small group discussion follows orientation. Completion of the program is prerequisite to eligibility for employment placement. Although employment is not a requirement of the program, the career education teacher assists all students interested in obtaining employment or in being placed in a Vocational Technical Center. According to the evaluation of the school, 73 percent of those students who completed the program (N=31) held jobs throughout the school year (Zuckerman, 1978).

Available evaluations of vocationally-oriented programs indicate that student attachment to school is enhanced by this approach. Students appear to like the practical orientation and applied learning experiences (Bernhardt and Owens, 1978). Where vocational exploration and work experience are explicitly integrated with development of cognitive competencies such as reading and math skills, these approaches do not appear to interfere with development of these skills (Owens and Gallegos, 1977).

However, there are other issues to be considered. Supervision of out-of-school field placements requires careful attention to ensure that learning goals are achieved. In addition, to justify costs, vocational programs should prepare youths for jobs which are unobtainable without program participation. Conversely, in tight labor markets, it may be a disservice to provide youths with skills for jobs which they cannot obtain. Vocational programs also may contribute to "tracking" certain youths into less desirable occupational roles (Arnove and Strout, 1978:21). Specific plans should be formulated for facilitating the transition from vocationally-oriented school programs to the world of full-time employment for students not continuing formal education.

Finally, it should be noted that vocational approaches are not essential in a successful alternative school. The Harlem Prep High School in New York serves a population of low income black youths, traditionally a group that experiences high unemployment rates. Many of Prep's students have dropped out of school or are on the verge of doing so. Most have had minimal academic success before entering the program. The school focuses exclusively on development of academic skills and good study habits in a disciplined work and learning environment. The goals are completion of high school and college placement. Vocational skills and out-of-school work experiences are not provided. The overall dropout rate from the program is 15 percent per year. According to the director, 95 percent of Harlem Prep's graduates obtain college placement (Dr. Ann Carpenter, 1979: Site Visit Interview).

D. Peer Counseling

Peer counseling (guided group interaction/positive peer culture) has been implemented in a number of schools across the country. Peer counseling is based on a recognition of the strength of peer influences on youths' behavior. The goal of peer counseling is to increase student commitment to school and to increase attachments between delinquent or pre-delinquent youths and more conventional peers by involving both "positive" and "negative" students in processes of discussion and problem solving.

This strategy is exemplified by the School Youth Advocacy Program, headquartered in Lansing, Michigan, which operates in sixteen Michigan school districts. Groups of nine to twelve students, segregated by sex, meet for one period each day, discussing problems and confronting one another regarding behaviors. An adult coordinator leads each group in problem solving activities and is available, when needed, outside the group. The group has decision-making power to impose sanctions for infractions by group members. If, for example, a person in the group is caught smoking in school, group members decide what measure should be taken and the group's decision is enforced.

Partners in Prevention in Oneida, New York; Positive Peer Culture in Omaha, Nebraska; and Peer Culture Development in Rock Island, Illinois have developed similar peer counseling programs which have been widely implemented. Single group, pre-post test evaluations of these programs suggest that delinquency, truancy, disciplinary violations, some types of drug use, absences, and school violence and vandalism have decreased in conventional schools where peer counseling has been implemented (Boehm and Larsen, 1978; Boehm, 1977; Howlett and Boehm, 1975; Shada and Winger, 1978). However,

because of weaknesses in evaluation designs, inadequate statistical analyses and uncontrolled subject attrition, we cannot attribute these results directly to peer counseling programs. The results may reflect chance, regression, maturation, history, or other effects.

Evaluation studies using quasi-experimental designs have shown mixed results for participants in peer encounter groups when compared with nonparticipants. Evaluation of the Positive Peer Culture Program in Omaha, Nebraska showed no significant difference between participants and nonparticipants in suspension rates and school grades. While participants had significantly lower rates of absenteeism than the comparison group before the program, their rates of absenteeism *increased* significantly during the year of the project, while absenteeism rates for the nonparticipants also increased, but not significantly. On the other hand, tardy rates for participants were higher than for nonparticipants during the year before the project and significantly lower for participants during the year of the project. The nonparticipants' tardy rates increased significantly over the two years while the participants' tardy rates decreased, though nonsignificantly (Malcom and Young, 1976). These results suggest that more rigorous evaluations of peer counseling approaches may not reveal such generally positive results as suggested by studies using simple pre-post designs.

Unfortunately, there is only limited evaluation data available on the use of peer counseling in alternative schools. Furthermore, some of the available results are not encouraging. For example, the Berrien County School-Based Peer Group Counseling Program evaluation found positive pre-post results in a number of the county's schools, but the small sample of five students surveyed in the county's Alternative Learning Center showed increases in a number of problem behaviors after program participation (Boehm, 1977).

In some regards, the use of peer counseling approaches in alternative schools parallels the detached gang worker approach to delinquency prevention. Both approaches work with groups composed largely of young people who have become disaffiliated from the mainstream. Detached gang workers have not been effective in turning gangs away from delinquent activities and may simply strengthen attachments among delinquent youths (Klein, 1969). To some extent, the same dynamic may emerge with peer counseling in alternative schools. Where the alternative school population is composed largely of disaffiliated youths, there will be little opportunity to mix disaffected and more conventional students in peer counseling groups. Thus, there may be limited potential for peer interaction sessions to use the influence of conforming students to encourage development of desired attitudes and values among disaffected students. Group processes may, indeed, reinforce negative behaviors.

Another possible problem with the use of peer counseling to control behavior is irresponsible use of peer pressure. "Without careful supervision, this process can become hostile and destructive, rather than conducive to insight and constructive outcomes" (Arnove and Strout, 1978:22).

Given the growing popularity of peer counseling and the likelihood that some alternative programs will use it, it is essential to rigorously assess its effects in alternative education programs. It cannot be assumed that positive results will be found.

E. Student Selection Criteria and Procedures

The "track," or type of academic program a student follows in school, is an important determinant of future academic opportunities, as well as satisfying adult roles. Education serves a:

> "gate-keeper function," consigning elite positions to some by means of a complex system of progressive, cumulative credentials, [and] conferring lower status on others through a graded system of progressively lowered credentials (Polk, 1975:321).

When they do not include the elements specified earlier, alternative schools can simply track disruptive students out of the public school system (Cardarelli, 1977:34).

The high proportion of low income, minority students often enrolled in an alternative adds weight to the tracking concern. Arnove and Strout (1978:18) have noted a "dangerous trend toward isolation of minority students and especially blacks" in alternative schools. They note that in 1976, an alternative for troublesome youths in Louisville, Kentucky, had a student body that was 85 percent black. Yet the school was located in a school district with only 20 percent black student enrollment.

On the other hand, some alternatives, such as Harlem Prep High School in New York, have been praised for their sensitivity to meeting the specialized needs of a minority population.

The prevalence of problems of tracking and racial segregation in alternative schools emphasizes the importance of selection criteria and the need for student participation in selection. Many alternatives seeking to deal with learning problems and disruptive behaviors receive students through referrals from teachers or other school staff after the students have misbehaved. Although referred students may be given the opportunity to decline participation, they often have few other options within the school system. Where this is the dominant method of student recruitment, the racial segregation noted by Arnove and Strout can easily occur. This recruitment approach may also limit alternative programs' abilities to encourage attachments between conventional and disaffected youths.

The use of different student selection procedures in some alternative programs has minimized these problems. The Alternative Learning Project in Providence, Rhode Island; the Pilot School in Cambridge, Massachusetts; and the High School

in the Community of New Haven, Connecticut select voluntary student applicants who represent a cross-section of the traditional school population with respect to ethnicity, sex, academic interest, and socioeconomic status. The Marmalade Hill School in Salt Lake City purposely integrates troubled youths into a mixed population of students to avoid negative labeling of student participants. Area D Alternative, originally a school populated by upper middle-class white students, now admits students according to the Los Angeles School District's integration standards of a 40 percent minimum, 60 percent maximum minority population.

While well designed alternative programs for disruptive youths should be continued, tracking and racial segregation concerns dictate that alternative student selection approaches be considered. Careful attention should be given to implementation issues, racial imbalances, possible labeling problems, and the effects associated with different approaches to student selection.

F. Location

The physical location of alternative programs is also an issue for further research. In response to the charge that these alternatives physically isolated from traditional schools simply provide a means for getting rid of disruptive students, some districts have offered alternative programs in the traditional school setting. Other alternatives have been established in separate buildings, with students taking a few courses each day in the traditional school. Still other programs have been developed as "schools-without-walls" with classes held in churches, offices, colleges and public buildings to encourage students to become involved community citizens.

A rationale can be presented for and against each of these models. Separate alternatives are likely to be small. Because they are removed from traditional schools, they may not conjure up negative associations in the minds of disaffected students (Readio, 1977). They can become warm, self-contained learning communities where attachment and commitment are reborn. Yet, separate alternatives may fail to prepare young people to deal with the bureaucratic institutions with which they must cope in the larger society, may limit the potential for mainstreaming students back into regular classes, and may track students to low status futures. Schools-without-walls may provide an opportunity for greater community integration, but they may fail to provide a geographical base for student identification and attachment.

To our knowledge, evaluations of the comparative effectiveness of different locations for alternative programs have not yet been conducted. Both positive and negative results have been reported for alternative programs within the traditional schools (Arnove, 1977; Holmes and Bernier, 1978) and for separate alternative facilities (Readio, 1977 and Readio, 1976). At this point, there is not sufficient evidence to recommend one location or type of facility over another. Again, consideration should be given to the strengths and weaknesses of various models in planning alternative programs. A range of models should be implemented so that their relative merits can be compared in evaluation studies.

G. Learning Models

Alternative schools for disruptive youth often serve students with markedly different learning needs and behavior problems (Arnove and Strout, 1978:27). This fact has led to recognition of the importance of individualized instruction discussed earlier. However, motivated by concerns about the practical difficulties of individualizing programs for all

the students in a classroom and by a belief that a limited number of distinct student "learning styles" can be identified, some researchers have attempted to develop typologies of learning styles. Their ultimate goal is to identify teaching methods best suited to different types of learners and to match students with the most appropriate learning environments to maximize their academic successes.

Fizzell, for example, has identified fourteen academic and social-psychological variables that he believes determine the type of environment in which a student can best achieve (1979:L1-L10). He has operationalized the variables in a 92-item "Schooling Style Inventory" (Fizzell, 1979:Appendix M). Fizzell suggests that twelve to fifteen different environments may be sufficient "to educate all students in atmospheres which lead to maximum gain with minimum problems, such as truancy, vandalism and poor personal relations" (1979:L9). Unfortunately, Fizzell's research has not been sufficiently rigorous to test his suggestions. He studied students in an alternative school he ran and found that 80 percent of those whose "learning profiles" were appropriate for the environment of that school were achieving academically in that environment (Fizzell, 1979). However, this result does not preclude the possibility that these students would have succeeded in other environments nor that students with "inappropriate" profiles would have succeeded in his alternative school.. Thus, it is currently impossible to determine the effectiveness of his approach of matching learner and learning environment for preventing delinquency.

Hunt has also developed a model which links the conceptual level of students with learning environments. Conceptual levels (CL) are derived from Piaget's work on the stages of cognitive development. They reflect the student's ability to comprehend material ranging from simple and concrete to complex and abstract. Learning environments are identified by the amount of external structure imposed by the teacher

on the student's acquisition of knowledge. They range from traditional, teacher-centered lecture approaches to self-directed student-centered approaches. Hunt's research has let him to conclude that

> low CL learners (i.e., simple, concrete) profit more from high structure and high CL learners (i.e., complex, abstract) profit more from low structure or, in some cases, are less affected than low CL learners by variations in structure (Hunt, 1974:321).

Again, however, the effectiveness of this approach as a delinquency prevention strategy is untested.

The technology of matching students with learning environments is still in a developmental stage. One potential problem with the approach is that establishing a number of different learning environments into which students are placed via a preference inventory may create a new form of an old problem: tracking. Arnove and Strout (1978:29) warn

> We...fear that the labels of student learning style or conceptual level may be translated into iron-clad categories and that students, so classified, will receive instruction geared primarily to a preconceived notion of capability or preference. Implementation of policies aimed at early identification, separation, and homogeneous grouping of students for special treatment conceivably may operate to the detriment of individuals--whose total range of capabilities and talents are not challenged--and to the detriment of racial minorities and low income groups.

On the other hand, it cannot be assumed that either allowing students voluntarily to choose among learning environments or assigning them to classes on the basis of subjective judgments of school administrators will match them with environments most likely to promote academic success and prevent delinquency (Duke, 1978:354). Student learning style assessments may ultimately provide a basis for more rational matching of students and learning environments though, as indicated, there is not enough evidence available to adequately evaluate the effectiveness of these approaches.

H. Primary Grade Alternatives

This paper has focused on alternative programs for students identified as disruptive or troublesome. Alternatives of this type have typically been offered to junior or senior high school-aged youths. Yet, academic failure (poor school achievement), disruptive behaviors, and truancy are often first manifested in the early school experiences of students who will later become delinquent (Feldhusen et al., 1976; Silberberg and Silberberg, 1971). Teachers' behavioral assessments of students in primary grades combined with other variables (sex, IQ, home location, an aggressive behavior index, and scores from the "K. D. Proneness Scale") have predicted long term social adjustment and delinquency with 79 percent accuracy (Feldhusen, 1978:7). This finding suggests the desirability of intervening when trouble signs first appear in school and before serious problem behaviors and disaffection must be remedied. To this end, some schools have provided alternative learning environments for primary grade school students.

The Sweet Street Academy (Arnove and Strout, 1978) is a program for "unmanageable" students in grades 3-7. It emphasizes the development of warm relationships between students and teachers and development of affective interpersonal skills. Individualized instruction is used for cognitive skill development. A 1975 evaluation of the program, using a single group pre-post design, showed substantial student gains in reading and mathematics, improved attendance rates, substantial improvements in behaviors of students previously noted as being troublemakers, and positive student and parent attitudes toward the school (Walizer et al., 1975a). Unfortunately, these changes cannot be directly attributed to the program since outcomes for comparison or control groups not served by the program were not measured. Given the evaluation design, we cannot rule out the possibility that maturation, or other causes were responsible for apparent student improvements while at Sweet Street.

Several issues must be considered regarding alternative programs for primary grade school students. First is the problem of identification. While teachers can correctly identify many students with academic and behavior problems, their predictions regarding subsequent delinquency are wrong in some cases (Feldhusen et al., 1976). The risks associated with such "false positive" identifications depend both on the type of subsequent behavior being predicted and the nature of the response to those identified. These risks are especially salient when attempting to identify "pre-delinquent youths" for special treatment. Being labeled and sorted for special treatment as a pre-delinquent may itself be an experience which encourages subsequent delinquency (Lundman and Scarpitti, 1978:214). Given the track record of predictive instruments and crime prevention interventions based on early identification of pre-delinquents (Monahan, 1975; Monahan and Cummings, 1975; Ray and Jeffery, 1967; Reckless and Dinitz, 1972), it is probably unwise to use teacher ratings, psychological tests or other tools to identify primary grade school students as pre-delinquents for special treatment.

On the other hand, teacher ratings can be used with less risk and greater confidence to determine which primary grade students need additional assistance to succeed academically. If the alternative education program offered these students focuses explicitly on increasing academic success and is not viewed or operated as a program for "predelinquents," it may assist these students and may, in some cases, help to prevent delinquency. It should be made explicit that the students included in such a program are *not* all likely to become delinquents without the program simply because they have had difficulties in school during early grades.

In summary, primary school alternatives should be implemented as programs to enhance academic success rather than as prevention programs for "predelinquents." This approach requires local districts to make commitments to expanding

opportunities for student academic success even though the potential for preventing subsequent school problems of violence and vandalism cannot be guaranteed. The delinquency prevention potential of such alternatives may only be demonstrable over a relatively long period.

For these reasons, special emphasis grants focused on delinquency prevention should not be used to create new alternatives for primary school students. The risks are that districts initiating primary school alternatives under such grants might focus primarily on preventing or controlling problem behaviors among students they identify as "pre-delinquents," rather than on ensuring academic success of students identified as needing academic assistance. This risk is less likely in districts where a commitment to primary school alternatives has already been made before Federal funds earmarked for delinquency prevention become available. Therefore, in the interests of maximizing the special emphasis funds available to answer the key research questions discussed here and to assess alternative education as a secondary delinquency prevention strategy, funds should be concentrated on programs for students in grades 6 through 12.

I. A Program Example, Evaluation Problems and Implications for Delinquency Policy

We have discussed elements which should be included in alternative education programs and issues which require further assessment. In this section, we present an example of an alternative education program which contains many of the elements we have discussed and which has been evaluated. The program is discussed, in part, because it represents a promising and reasoned approach to alternative education for disruptive youth Its evaluation is discussed because, like most evaluations of alternative education programs, it does not tell us whether this promising and reasoned approach is effective in preventing delinquency or, for that matter, in

increasing academic success and decreasing rates of truancy and suspensions among its students.

The Learning Alternatives Program (LAP) in Tampa, Florida, is an alternative junior high program for students identified as needing specialized educational and behavioral services as a result of a history of problems such as truancy, learning difficulties, or law violations. In the program, a teacher and a counselor are assigned to each class of ten students.

Students attend LAP classes for four periods each morning. They attend two regular school classes (physical education and an elective) in the afternoon. This arrangement seeks to ease the transition back to the traditional school and to lessen the negative labeling attached to being in a special program. The last period of the day is set aside for the group to meet as a whole with the teacher and counselor to review activities, deal with problems, set short term goals, and reinforce achievements.

An individualized academic program is developed for each student. All students are pretested and post-tested in English and math and are assessed on attitudinal and behavioral measures. The goal is to provide a learning program where students experience success. In addition, coping and problem solving skills, skills for seeking and holding employment, respect for authority, and responsibility are emphasized.

The counselor works with students and their parents on any nonacademic problems that arise and is available to provide support after school hours. Weekly sessions are held in the students' homes or the community, so that youths experience support in these environments. The counselor meets regularly with parents to teach parenting and communication skills. Faculty contacts are made following student absences and truancies.

Evaluation of LAP has shown a 91 percent reduction of court-recorded delinquent offenses and a 23 percent reduction in status offenses although, as discussed shortly, these figures are misleading since the baseline period was the youth's

entire life before program entry. More valid indicators of student changes are a 52 percent reduction in suspensions and a 72 percent reduction in unexcused absences during LAP participation when compared with the previous school year. Aggregate student scores on the California Test of Basic Skills increased at a rate of .20 per month, above the .18 specified by the E.S E.A. Title I Supplementary Education Grant (DeVolentine, 1978). Unfortunately, as is the case with many evaluations of alternative programs, the LAP evaluation is not sufficiently rigorous to allow conclusions to be drawn regarding the program's effectiveness in bringing about any of these changes.

The problems in the LAP evaluation illustrate the general weakness of many existing evaluations of alternative education programs. They are described here both to highlight the dilemma currently facing those who seek to use existing research on alternative education as a basis for planning for delinquency prevention and to demonstrate the need for more rigorous evaluation of alternative education in the future.

There are three major problem areas in the LAP evaluation which have appeared repeatedly in the evaluations of alternative education programs we have reviewed. The first problem is the research design. A one group pretest/post test design was used. This design does not control for statistical regression toward the mean. Many students were moderately to highly delinquent at the beginning of their participation in LAP. Lower rates of delinquency may have been likely even without the program. The one group pretest/post test design also fails to control for changes due to maturation. Students may have outgrown some of their delinquent or troublesome behaviors. Both regression and maturation may have been responsible for observed changes in LAP participants. The results reported cannot be attributed to the program on the basis of one group pretest/post test design. Yet this design

is commonly used in evaluating alternative education programs (Clark, 1978; DeVolentine, 1978; Holmes and Bernier, 1978; Walizer et al., 1975b; Zuckerman, 1978). This concern with evaluation design rigor may seem a rather fine point. However, less rigorous pretest/post test studies have repeatedly produced positive results in contrast to the less optimistic conclusions resulting from controlled studies in which other possible explanations for observed outcomes are assessed (Lundman and Scarpitti, 1978:210).

The second problem is in measures used. Some evaluations fail to specify and assess any delinquency variables at all. Yet even where these are specified they are often poorly operationalized. In the LAP evaluation, for example, official court-recorded delinquency and status offenses were the only delinquency measures used. There are two problems in LAP's use of these measures. First, all officially accumulated delinquencies and status offenses prior to LAP admission were used as the baseline for comparison with officially court-recorded delinquencies during a single school year of LAP participation. The two time frames (lifetime before the program and a maximum of eight months during the program) are vastly different. Pretest/post test comparisons based on percentage reductions in official delinquency during these two time periods are likely to vastly overestimate changes in delinquency. Yet, the LAP evaluation used this comparison as the indicator of delinquency outcome.

Secondly, court-recorded delinquents are not adequate measures of youths' actual behaviors. Court-recorded offenses reflect criminal justice system variables including police and court discretion in processing cases (Piliavin and Briar, 1964; Lundman and Scarpitti, 1978:217). Law enforcement or court decisions as to whether an encounter with a youth will lead to a court record may be influenced by a number of factors unrelated to delinquent behavior (William and Gold, 1972), hence biasing official delinquency rates. Furthermore,

court records reflect only a small proportion of actual delinquent behavior (Gold, 1966). To assess changes in delinquent *behavior*, self-reports of delinquent activities should also be secured in evaluations. Again, this problem of inadequate delinquency measures is common in evaluations of alternative programs. Where alternative school evaluations look at delinquency outcomes at all, they generally rely solely on officially recorded delinquency (Clark, 1978; Grady, 1978; Zuckerman, 1978).

The third major problem in alternative school evaluations is in data collection and analysis procedures. In the LAP evaluation, adequate care was not taken in data collection and analyses to insure confidence in either the accuracy or significance of results. For example, positive change scores were reported on achievement tests from the pretest to the post test. Yet only students who had remained in school until May of the intervention year were post tested. A substantial number of LAP participants (32 of 74) were no longer in LAP by May to be post tested. Thus, the loss of the least academically successful students from the post test may account for the apparently positive results on the California Test of Basic Skills. Finally, null hypotheses testing was not conducted on any of the reported changes to assess the extent to which observed results were significant and not attributable to chance alone.

The LAP evaluation is typical of many alternative school evaluations. The methodological weaknesses in the evaluation do not allow a determination of whether the program actually generated the desired effects. As a result of such weaknesses in research on alternative education, we are left recommending elements to be included in alternative education programs on the basis of conceptual logic and correlational evidence regarding delinquency causation. Policy regarding alternative education for delinquency prevention must currently be

formulated without certain knowledge of the effectiveness of such programs.[9] If this situation is to be remedied and a reliable knowledge base developed for future policy, alternative education programs funded to prevent delinquency must be evaluated using designs which allow assessment of program effects. It is with the goal of encouraging more rigorous evaluations of new alternative education programs that we present the final section of this report.

VII. STANDARDS FOR EVALUATION OF ALTERNATIVE EDUCATION

In this final section, minimal criteria for evaluation designs for alternative education programs are outlined.

A. Process Monitoring

Alternative programs should develop procedures for describing and monitoring the following program elements (adapted from Walker et al., 1976).

1) Context
   - a. The historical antecedents of the program
   - b. The organizational structure of the program
   - c. A description of the physical facility and location

2) Student Identification
   - a. Criteria for eligibility
   - b. Student selection procedures used
   - c. Referral sources
   - d. Student characteristics (age, ethnicity, dates of admissions and termination from the program, attendance, etc.)

3) Intervention Strategies

a. The theory base of an alternative education program which states the presumed causes of delinquency the program seeks to address and the rationale for the approaches used in the program

b. Actual activities of the alternative program

c. Duration of services

d. Intensity of services

e. Characteristics of the alternative learning environment[10]

Without documentation of these program elements, outcome evaluation studies are relatively useless for policy making even if they yield positive results, since they do not describe what generated observed results, making replication impossible.

An ethnographic component of the process evaluation which provides narrative descriptions of the program, implementation issues, problems encountered, and solutions found can also provide important data and should be considered.

B. Outcome Studies

1) Standardization of Measures

Standardized measures of the outcome variables of interest should be used in evaluations of alternative education programs. Standardized measures will facilitate cross-program comparisons of results, allowing assessments of the relative effectiveness of various alternative education approaches. This will clearly be beneficial as a basis for future policy decisions. Given the importance of standardized outcome measures, funding agencies should specify, in advance, those measures which should be used in evaluating programs. Clearly, programs should have the latitude to add

evaluation measures relevant to their particular approaches. However, clear specification of minimal evaluation criteria and measures will assist those who respond to grant solicitations in developing goals and objectives consistent with the funding agency's expectations.

The following outcomes should be assessed in alternative education programs for disruptive youths.

a. Academic performance. Standardized achievement or competency tests (such as the California Test of Basic Skills) should be used to evaluate academic achievement. Use of these standardized measures is particularly important in alternative programs where traditional indicators of achievement, such as school grades, are themselves manipulated or eliminated as part of the intervention. For those students working toward the goal of high school graduation, attainment of a diploma or GED can also be used as a measure of academic success. Finally, students' perceived academic competence should be assessed on a time-series basis using a survey instrument.

b. Student commitment to edcuational pursuits and attachment to school. Student commitment and attachment to school should be evaluated using a survey instrument (see Elliott and Voss, 1974 for an example). Withdrawal rates and reasons for withdrawals; attendance and tardy rates; and average percentage of pupils absent from class during each period can also be used as unobtrusive measures of commitment to school (Webb et al., 1966).

c. Attachment to conventional others and delinquent peers. Student attachments to others in the school can be assessed using a survey instrument which includes items which ask how much students like their teachers and how many of their friends have been picked up by the police for delinquent activities.

d. Occupational attainment. "Academic experiences are to be treated *instrumentally* as means to further

ends, rather than intrinsically in terms of interest or enthusiasm with the substance" (Polk, 1975:321). Longitudinal follow-up studies on students' occupational attainment should be conducted in part to investigate the possibility that alternatives "track" students into lower socioeconomic status labor market positions.

e. Prevention of delinquency. Three sets of delinquency-related measures should be used. First, official records of involvement with the criminal justice system should be collected for participants. Although these data do not validly represent delinquent behavior and cannot be reliably compared across jurisdictions due to differences in policies of various components of juvenile justice systems, they can be used for pre-post comparisons of official legal processing and to assess the costs incurred or saved by the criminal justice system.

Second, a confidential self-reported delinquency data collection tool should be used (see Hirschi et al., 1979 for sample items). Self-report measures will provide information on student behaviors from pretest to post test periods and should be comparable across jurisdictions and programs. While self-report measures appear to produce reliable estimates in descriptive studies (Hirschi et al., 1979), it should be noted that such self-report measures may be subject to halo effects and other threats to validity (Campbell and Stanley, 1966) when used in evaluations of programs which seek to prevent delinquency (Gould, 1969). For example, participants who are aware of the goals of the program may report lower rates of delinquency after program participation, though their actual behaviors have not changed. The possibility of validity problems underscores the importance of using multiple measures of delinquency in evaluating program outcomes (Lundman and Scarpitti, 1978).

Third, the incidence of school violence and vandalism over time should be used as a measure of delinquency. Comparison of the costs of vandalism between experimental and comparison schools may itself yield an indication of the effectiveness of alternative schools.

f. Cost measures. Finally, evaluations should include measures which allow assessment of cost-effectiveness or cost-benefits. Although a school may be found to be successful in delinquency prevention, high costs may militate against replication. Efforts should be made to assess possibilities for the alternative to become self-reliant. Successful programs with budgets grossly over the traditional schools' allotment per pupil may not be continued or replicated.

Cost-benefit studies should evaluate direct school operational costs and indirect benefits accrued to the schools and the criminal justice system (if any). These studies should assess the cost-effectiveness of enrolling disruptive students in alternative schools as opposed to hypothetically processing them through the criminal justice system at a later point in time. Studies should also investigate projected cost savings from reduced school vandalism, possible savings from the reduced need to invest in more expensive designs and construction to make a school "secure," savings from the need to hire security guards, savings from more task-oriented uses of school staff (e.g., teachers as faculty members as opposed to security guards), and other possible benefits. Fizzell notes, for example, in his evaluation of the Truant's Alternative Project, that in one school "there was substantial increase in state aid due to improved attendance" (Fizzell, 1979:4). Finally, possible community benefits derived from a demonstrably safer school and community should be considered in selecting evaluation measures.

2) Research Designs for Outcome Evaluations

Research in alternative education has been impaired

by inadequate sample sizes and the lack of control or comparison groups. The reasons for this have been manifold. As noted by Shorr et al. (1979:30), most alternative school programs are not "experiments designed solely, or primarily, to increase our knowledge about school-based delinquency prevention programs." Rather, they seek to control and prevent immediate problems in schools. As a result, they work with the students most in need of their services. A comparable unserved group for study is often unavailable. Rigorous evaluative research may simply not be a priority in the face of immediate school and student needs and problems.

Nevertheless, if the effectiveness of alternatives for delinquency prevention is to be determined, is is imperative that those who fund alternative education programs for delinquency prevention earmark adequate resources for rigorous evaluation. To assess program effectiveness, evaluations should use quasi-experimental or experimental designs in which participants are compared with nonparticipants. Where random assignment to an alternative program is not feasible, time-series designs should be used so that trends in outcome variables of interest can be compared across participants and nonparticipants who may be students on waiting lists for program admission, students in a school not served by the alternative, or youths matched for prior delinquent histories, to name a few possibilities.

3) Research Time Frame

Evaluation studies should include longitudinal follow-up studies to assess alternative schools' effects on student behavior and academic achievement over time. Students should be pretested on standardized academic competency tests and surveyed for self-reports of delinquent acts prior to admission into the program. Academic achievement, delinquency, and other variables discussed above should be investigated at periodic intervals during the program and immediately after program completion. Follow-up data on delinquency, academic

success, and labor market achievement should be gathered at least one year after program completion. Ideally, the follow-up should last at least twice as long as the treatment period (e.g., a one-year-long program should have at least a two-year follow-up) (Fizzell, 1979, Appendix K).

Without standardized measures, rigorous evaluation designs, and adequate follow-up time frames, we will continue to be unable to assess the effectiveness of alternative education for delinquency prevention. Policy and funding decisions will continue to be made without such knowledge.[13]

VIII. CONCLUSION

In conclusion, it should be noted that the success of alternative education programs depends on a number of implementation factors not discussed here. For example, in order for public alternative schools to succeed, school districts must make commitments to the value of alternative education. Where alternative programs for disruptive youths include the elements outlined earlier, they should increase academic success and commitment to educational pursuits and prevent delinquency among participants. Where programs are not designed with attention to these elements, they can become "dumping grounds" for disruptive students and unlikely to prevent delinquency. School districts will ultimately need to finance alternative projects at a per-student rate at least equivalent to that of other schools in the system. Yet, sufficient autonomy must be given to the alternative program to experiment and diverge from the traditional system in areas such as staff hiring, student grading, and evaluation (Arnove and Strout, 1978). Support from the community will have a major impact on programs. An active constituency of students, teachers and administrators, parents, criminal justice system members, and other concerned citizens can

help a program survive (Arnove and Strout, 1978). Implementation issues and approaches in alternative education are extensively discussed in *Alternative Education Options* (Fenrich et al., 1979).

NOTES

1. See Feldhusen, 1978 for a more extensive review of the literature on school related problems.

2. Data cited are from Weis's (1974) Lafayette data set, a cross-sectional study of eighth and eleventh graders in California; Hindelang's Somerville data set, a cross-sectional study of students in the tenth, eleventh, and twelfth grades in an east coast high school; and Elliott and Voss's (1974) San Diego data set, a four-year longitudinal study which followed a group of California high school students from ninth through twelfth grades, maintaining dropouts in the sample.

3. While the correlation between having delinquent or deviant friends and self-reported delinquent behavior has repeatedly been shown to be strong, there is currently much debate as to whether delinquent behavior precedes association with delinquent friends (i.e., delinquents flock together) or association with delinquent friends leads to delinquency (i.e., delinquent peers cause delinquency) (Weis et al., 1979). While more longitudinal research is needed to provide definitive answers regarding the causal ordering of the relationships, available longitudinal studies on marijuana use among adolescents suggest that association with others involved in use precedes use itself and, thus, may contribute to this form of delinquency (Jessor et al., 1973; Krohn, 1974).

4. A number of alternative programs have implemented individualized learning programs and/or contingency reward systems as discussed in this section. The Aurora Street Academy in Aurora, Colorado offers a nongraded curriculum and utilizes learning contracts, signed by student and teacher involved, to enable students to earn points for school credit. To emphasize student responsibility and participation in the decision-making process, unmet contracts are reviewed quarterly by a student-dominated appeal board (Flaxman and Homstead, 1978:34). At the Alternative Learning Project in Providence, Rhode Island "Social Contracts" are drawn up by students with help from teacher-advisors and signed. The contracts define each student's curriculum package (concentration in the Visual Arts, Performing Arts, Education, Law and Justice, Medical Care, or Communications), personal learning goals, and methods of obtaining the goals. These methods may include regular coursework offered through the school, courses taught by volunteers, site placement in local businesses or agencies, and courses at other academic institutions in the Providence area (McKinney,

n.d.). In the contingency contracting system of the Hilo Hukilike Alternative Junior High School in Hilo, Hawaii, each student contracts with his or her teachers on a daily basis to attend class on time, perform routine tasks, complete 80 percent of his or her assignments with 90 percent accuracy, and be respectful to his or her teachers. Students receive points which are usable for purchasing privileges or paying fines for inappropriate behaviors. Points give students the right to participate in school trips, including overnight campouts. Contracts also place conditions under which students are eligible to participate in an off-campus work-study program.

5. Open classrooms in Bennett's study were characterized by nonassigned seating arrangements, freedom for students to move around the classroom, freedom for students to talk to each other, and greater proportions of teacher time spent working with students individually or in groups compared with time spent addressing the class as a whole.

6. The advantages of small school size are described in an evaluation of the City School in Madison, Wisconsin which averaged between 105 and 120 students during the first four years of its existence (1971 to 1976). The evaluation cited the following advantages of this size: greater opportunities to know everyone in the school, to form close relationships with the teachers, to participate in democratic decision-making, to individualize instruction, to institute changes, and to build teacher cohesion.

> ...A crucial factor lies in the greater educational opportunities and demands for involvement in certain areas. At City School activities such as plays involve a great percentage of the student body at one time or another. This involvement cuts across all lines and the activity is, thus, not dominated by a certain group of people. People in a small setting can be involved and are often required to be involved in a great many activities just so they can happen (Evaluation Management Group, 1976:3).

7. Examples include *Magic Circle* (Palomares, 1974), *Curriculum for Meeting Problems*, and *Values Clarification* (Harmin et al., 1973; Howe, 1975).

8. Though not an alternative school, the Blauvelt Elementary School in Cottage Lane, New York provides an example of the importance of the administrator in establishing overall school climate and promoting academic success among students.

The Blauvelt Principal, Dr. Jo Ann Shaheen, instituted a school-wide program, Esteem PACT, which was designed to unify the efforts of parents, administrators, students, and teachers toward raising children's self-esteem. She revitalized the Student Council by creating two Student Advisory Councils, Big SAC for the pupils in grades 3, 4, and 5, and Little SAC for those in grades K, 1 and 2. Both Big SAC and Little SAC members have been taught problem-solving techniques for addressing real school problems. Students are encouraged by the faculty and principal to express their feelings about their school through letters or direct conversations. Furthermore, Shaheen has worked to make the school a place where students never lack something to do by sponsoring school "Read-a-thons," "Metric Week," Saturday Fairs displaying the children's work, a project to study mass production in which assembly lines were organized to create sandwiches, and other activities.

Although we have not reviewed the evaluation of the Blauvelt School to assess its rigor, Howard (1978) reports that results have been positive. Parents have been very receptive to the school: Eighty-two percent of the K-2 parents and 75 percent of the 3-5 parents have indicated that their children "almost always like school." Academically, Blauvelt students have scored above average on the New York State Pupil Evaluation Program (PEP) tests. Before Esteem PACT was instituted, 38 percent of the third grade students tested in stanine 7, 8, or 9 in reading, and 47 percent scored in stanine 7, 8, or 9 in mathematics. Since the program has been in operation, the proportion of third graders testing in stanine 7, 8, or 9 has risen to 67 percent in reading and 70 percent in mathematics (Howard, 1978).

9. It should be noted that one group pretest/post test evaluations may be useful for immediate program planning decisions. The results can be used to identify areas in which participants are improving and areas in which the desired improvements have not occurred. They may also be useful in comparing participant outcomes against program goals and objectives (see Zuckerman, 1978, for an example). They are less useful for informing policy decisions regarding types of programs to fund.

10. Standardized instruments can be used for assessing the school environment. See Trickett and Moos, 1974; Epstein and McPartland, 1975.

11. Currently, Martin Gold at the Institute for Social Research at the University of Michigan is conducting a major experimental study of alternative education programs which seeks to overcome research problems common in most available studies of alternative education. His study should provide important information for policy-makers.

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